

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for transmission of data over a data transmission network, for establishing a datagram transference from a first circuit switched transmission line that has at least a first circuit switched network node and a second circuit switched transmission line that has at least a second circuit switched network node, comprising:

employing, in the data transmission network, an IP protocol from [[a]] said first network node receiving data from [[a]] said first circuit switched transmission line to [[a]] said second network node transmitting data into [[a]] said second circuit switched transmission line; and

determining, in accordance with a predefined rule, an indication of a destination address of an IP protocol datagram comprising data received from the first circuit switched transmission line for transmission to the second network node based on circuit switched channel identifying parameters which identify at least one channel in the second circuit switched transmission line and an IP protocol address of the second network node,

wherein a header is provided with the indication indicative separately for each time slot of at least one of said network nodes, on whether the IP protocol datagram carries the corresponding channel, so that when the IP protocol datagram lacks carrying the corresponding channel indication, the receiving packet network node is enabled to receive data to that channel from other sources from a IP-network in a non-consecutive manner.

2. (Canceled)

3. (Previously presented) The method of claim 1 wherein the IP protocol is an X.25 protocol.

4. (Previously presented) The method of claim 1, wherein data from at least one channel of the first circuit switched transmission line is transmitted as compressed data over the data transmission network.

5. (Previously presented) The method of claim 4 wherein only compressed speech signal parameters of a signal received from said at least one channel of the first circuit switched transmission line are transmitted over the data transmission network;

wherein said received signal comprises an uncompressed speech signal part and compressed speech parameters.

6. (Previously presented) The method of claim 4, wherein the received signal of said at least one channel of the first circuit switched transmission line is compressed in the first network mode.

7. (Previously presented) The method of claim 4, wherein compressed speech parameters received from the first network node are decompressed into an uncompressed speech signal before transmission into the second circuit switched transmission line.

8. (Previously presented) The method of claim 1, wherein samples of data from more than one channel of the first circuit switched transmission line over the data transmission network in one IP protocol datagram.

9. (Previously presented) The method of claim 1, further comprising the steps of:

transmitting a message which describes supported coding modes for compressed speech parameters from the first network node to the second network node; and

describing said supported coding modes in said transmitted message in an order of preference for optimizing speech data transmission.

10. (Currently Amended) A network element for connection of a circuit switched transmission line to a data transmission network employing a IP protocol, wherein the network element comprises a IP protocol address generating unit for generating IP protocol addresses for IP protocol packets based at least partly on parameters identifying at least one channel of the circuit switched transmission line, wherein said network element is arranged to implement the method according to claim 1.

11. (Canceled)

12. (Previously Presented) The network element according to claim 10, wherein the network element comprises a compressed speech parameter extraction unit for extracting compressed speech parameters from at least one signal from the circuit switched transmission line, said at least one signal comprising an uncompressed speech signal part and compressed speech parameters.

13. (Previously Presented) The network element according to claim 10, wherein the network element comprises a compression unit for compressing a signal of at least one channel of the circuit switched transmission line before transmission over the data transmission network.

14. (Currently Amended) A method for transmission of data over a data transmission network, comprising:

employing, in the data transmission network, an IP protocol from a first network node receiving data from a first circuit switched transmission line to a second network node transmitting data into a second circuit switched transmission line;

determining, in accordance with a predefined rule, a destination address of an IP protocol datagram comprising data received from the first circuit switched transmission line for transmission to the second network node based on circuit switched channel identifying parameters which identify at least one channel in the second circuit switched transmission line and an IP protocol address of the second network node; and

inserting status information into the datagram,

wherein a header is provided with the indication indicative separately for each time slot of at least one of said network nodes, on whether the IP protocol datagram carries the corresponding channel, so that when the IP protocol datagram lacks carrying the corresponding channel indication, the receiving packet network node is enabled to receive data to that channel from other sources from a IP-network in a non-consecutive manner.

15. (Previously presented) The method of claim 14, wherein said status information comprises at least an indicator to indicate activity of the at least one channel, a length of samples of the at least one channel and weather channel information definition is comprised in the datagram.

16. (Currently amended) A method for transmission of data over a data transmission network, comprising:

employing in the data transmission network, a IP protocol from a first network node receiving data from a first circuit switched transmission line to a second network node transmitting data into a second circuit switched transmission line;

determining, in accordance with a predefined rule, a destination address of a IP protocol datagram comprising data received from the first circuit switched transmission line for transmission to the second network node based on circuit switched channel identifying parameters which identify at least one channel in the second circuits witched transmission line and a IP protocol address of the second network node; and

determining an IP address based on a time slot number having data which is transferred in the datagram,

wherein a header is provided with the indication indicative separately for each time slot of at least one of said network nodes, on whether the IP protocol datagram carries the corresponding channel, so that when the IP protocol datagram lacks carrying the corresponding channel indication, the receiving packet network node is enabled to receive data to that channel from other sources from a IP-network in a non-consecutive manner.

17. (Previously presented) A network element configured to implement the method according to claim 14.

18. (Previously presented) A network element configured to implement the method according to claim 16.

19. (Currently amended) A method for transmission of data over a data transmission network, comprising:

employing, in the data transmission network, a IP protocol from a first network node receiving data from a first circuit switched transmission line to a second network node transmitting data into a second circuit switched transmission line;

determining, in accordance with a predefined rule, a destination address of a IP protocol datagram comprising data received from the first circuit switched transmission line for transmission to the second network node based on circuit switched channel identifying parameters which identify at least one channel in the second circuit switched transmission line and a IP protocol address of the second network node;

inserting a number of samples from said at least one channel of a transmission line into a payload portion of a data packet; and

indicating a destination transmission line and a channel within the transmission line in a destination packet address,

wherein a header is provided with the indication indicative separately for each time slot of at least one of said network nodes, on whether the IP protocol datagram carries the corresponding channel, so that when the IP protocol datagram lacks carrying the corresponding channel indication, the receiving packet network node is enabled to receive data to that channel from other sources from a IP-network in a non-consecutive manner.

20. (New) The method of claim 1, wherein the method comprises transmitting the number of time slots in the corresponding frame.

21. (New) The method of claim 1, wherein the method comprises receiving data of different time slots of a single PCM trunk line from different packet network gateways.

22. (New) The method of claim 1, wherein a first packet network gateway sends data to time slots 5 to 10 of at least at the rate 2048 kbit/s PCM trunk line at a second packet network gateway.

23. (New) The method of claim 4, wherein a third packet network gateway is arranged to send data to the rest of the time slots of the same PCM trunk line.

24. (New) The method of claim 1, wherein the destination packet network gateway is arranged to receive a group of channels from another packet network gateway.

25. (New) The method of claim 1, wherein the single channels are arranged to be received separately from one or more other sources, such as IP telephones.

26. (New) The method of claim 1, wherein said determining is based on circuit switched channel identifying parameters in the header.